
ENVIRONMENTAL Fact Sheet



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WMD-SW-13

1998

Recycling Office Waste Paper

Office Waste Paper in Solid Waste

Weight and Volume -- The term "office paper" covers a wide variety of paper grades, including computer printout paper, high quality printing and written papers, and file stock, such as 3x5 cards and file folders. Approximately 6.8 million tons of office papers were generated as waste in the United States in 1995, or about 3 percent of all municipal solid waste (MSW). Three-fourths of office paper is generated by commercial sources. Nationwide, office paper constitutes 6-10 percent of the commercial solid waste stream. The balance of office paper is derived from residential sources. For some businesses, like law firms and engineering firms, office paper is the largest single component of solid waste and can make up 85 percent of the business' waste stream.

Disposal -- With rare exceptions, office paper is free of toxic or other hazardous constituents that might pose environmental or health concerns upon disposal. Office paper is biodegradable, and can be safely composted. However, in a landfill it degrades very slowly if the environment is moisture- and oxygen-depleted. Office paper is a valued addition to the mix of fuels combusted in waste-to-energy facilities, releasing nearly twice as much heat per pound as does mixed MSW, and producing little ash.

Office Paper Recycling

Collection, Processing, and Storage -- Because of its generally high value, office paper is a stable recycling commodity. In New Hampshire, many municipalities' waste management programs accept office paper for recycling, although commercial and industrial solid waste may not be handled.

Typically, businesses contract with private haulers for solid waste collection and disposal. Recycling options are available to most businesses through private haulers, recycling processors, or paper brokers, and many businesses can realize significant waste management savings (and, in some cases, revenue) by diverting paper from disposal to recycling. Many buyers will provide a regular pickup service for customers who generate large volumes of wastepaper. Smaller businesses can either stockpile paper to accumulate a volume sufficient to market, or coordinate with other businesses to consolidate paper into quantities large enough to attract a buyer, or contact their municipal recycling program which may be willing to accept office paper for recycling. A large local business with regular paper pickup might serve as a dropoff point for paper generated by smaller firms. Material recovery facilities (MRFs) and waste processors often accept office paper.

In all cases, collection and processing considerations are similar: paper must meet the material specifications established by the buyer; contaminants (tape, paper clips, etc.) must be excluded according to the buyer's requirement; and the paper must be kept dry and out of the sun. Because of the wide mix of papers generated by different businesses, and the similarly broad range of paper grades recognized by brokers and mills, it is particularly important to establish specific arrangements with a buyer regarding the mix of papers that will be collected. For example, a business may arrange to collect one mix of printing, copying, and computer papers for more significant income, and a second "mixed paper" stream of post-it notes, envelopes, file stock, and other papers for much smaller revenues.

Manufacturing -- Most office papers are high-quality products characterized by long fibers and high strength. In addition, many office papers are brighter than newsprint and packaging paper grades, and so can be remanufactured without additional bleaching. Office papers can be used as feedstock to manufacture a wide variety of recycled paper products, including tissue and paper towels, printing and writing papers, boxboard, and containerboard. Until recently, laser-printed papers (including copier paper) were difficult to recycle because of the tight bond between paper fibers and the chemical toner; new deinking technologies have largely overcome this problem, however, and high quality laser-printed papers are now among the most sought after recycled papers. Environmentally, paper production from recycled fiber consumes less energy, produces fewer emissions to air and water, and generates less solid waste than production of similar products from virgin fiber.

Markets for Recycled Office Paper -- Regional markets for recycled paper are well established. As with all recyclable materials, prices paid by processors will vary. Recycling office paper can provide a significant economic incentive due to avoided costs of disposal and the potential revenue generated from high quality office paper. Revenues are much less for mixed paper grades, but savings in tipping fees often provide sufficient incentive to recycle mixed paper as well.

A critical factor in recent market growth for recycled office paper fiber (and other recycled fibers) has been a growing number of public and private sector commitments to purchase recycled paper. Under a 1993 law, the State of New Hampshire will purchase only paper with 20 percent post-consumer recycled fiber which increases to 30 percent on December 31, 1998. The state and private sector representatives have developed a statewide "Buy Recycled Challenge" to encourage additional recycled paper purchases by New Hampshire's business community. Another DES fact sheet, "Buying and Using Recycled Paper," provides additional information on the importance of "buying recycled" and the differences between virgin and recycled papers. Buying paper made from recycled stock helps to keep markets strong.

For More Information -- Additional information on recycling office waste paper and other materials in New Hampshire is available from: Recycling Coordinator, NH Department of Environmental Service, Waste Management Division, 29 Hazen Drive, Concord, NH 03301, Telephone: 603-271-2900; TDD Access: Relay NH 1-800-735-2964.